



PROJECT:	Linton Housing Development
CLIENT:	Yelcon/Camstead Homes
CONTRACTOR:	Cocksedge Construction
PRODUCT:	Omega Flow
SIZE:	2,000 m ²

However, the nature of the site – which had suffered from low permeability and low strength of the existing ground in addition to its steep gradient – meant that creating even a permeable pavement represented a significant challenge.

The solution developed by the engineer incorporated several novel elements to strengthen the pavement as well as to protect the permeable sub base during construction.

Given the technical challenge, the contractors needed a paving supplier whose products and service could meet the complex site requirements. Brett Landscaping, a regular supplier to Cocksedge Construction, was consulted on the engineering plans and provided invaluable construction advice to Bowie Construction to ensure the smooth implementation of the plans.

At the same time, Brett supplied two variants of their Omega Flow permeable block paving – 80mm Autumn Gold for the access road and 60mm Burnt Oak for the driveways – for visual contrast and varying thickness to suit the different traffic volumes across the site.

The bold aesthetics of the Brett paving solution gives no hint of the complex engineering taking place underneath. Infiltration into the ground was the only option to drain the permeable pavements so the engineering designer had to improve the stiffness of the pavement to compensate for the low permeability and potential softening of the sub grade.

As the only access to the site was via the new road, the engineer therefore incorporated an impermeable dense bitumen macadam (DBM) layer on top of the permeable sub-base, to provide a protective surface for temporary

construction traffic access during the house construction. This also had the added benefit of stiffening the pavement.

At the completion of the housing construction and prior to the completion of the installation of the Brett Omega Flow permeable block paving, the DBM was cored to allow water to infiltrate into the permeable sub base below.

“This is a superb example of how a permeable pavement is not only a viable option on a site that had no surface water discharge facilities, but can also be the most cost-effective solution, compared to alternatives that would have required a great deal more civil work to become feasible,” Explains Andy Bowie of Bowie Construction.

For Cocksedge, using Brett Landscaping has become a no-brainer. “We’ve turned to Brett many times over the years, and have always been pleased with the company’s standards, quality and service, not to mention value for money,” confirms Dave Pearson.

Pearson has made several return visits to the site since the project’s completion, and confirms that the Brett Landscaping solution is doing its job. “Seeing the completed permeable paving perform so well, particularly against the backdrop of the country’s recent weather conditions in early 2014, has been rewarding, and is proof of a job well done.”

The expertise of Brett Landscaping in designing permeable pavements has played a vital role in ensuring the viability of a high density housing project on a site with difficult drainage and ground conditions.

Brett Landscaping worked closely with the main contractor Cocksedge Building Contractors and groundwork contractor Bowie Construction to enable the laying of Brett Omega Flow permeable block paving, after the implementation of an ingenious engineering strategy at the site.

With the proposed increase in building on the site, drainage was an issue, as Dave Pearson of Cocksedge explains.

“As there was no stormwater system available to drain the proposed road or driveways, it was a requirement of planning consent that a Sustainable Drainage System (SuDS) was implemented for this project. It was not feasible to channel surface water run-off into soakways and there was no space for swales or ponds, therefore permeable pavements became the only viable option.”